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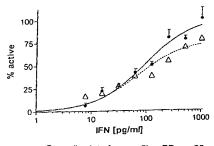
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(54) Title: CONJUGATED BIOLOGICAL MOLECULES AND THEIR PREPARATION



--- Our native Interferon-α 2b:  $ED_{50}$  = 90 pg/ml --Δ-- Our pegylated Interferon-α 2b:  $ED_{50}$  = 123 pg/ml

$$\begin{array}{c} X - Q - W \longrightarrow A - z^{1} \\ X' - Q \longrightarrow B - z^{2} \end{array}$$
 (1)

(57) Abstract: Novel biologically active compounds of the general formula (I) in which one of X and X' represents a polymer, and the other represents a hydrogen atom; each Q independently represents a linking group; W represents an electron-withdrawing moiety or a moiety preparable by reduction of an electron-withdrawing moiety; or, if X' represents a polymer, X-Q-W- together may represent an electron withdrawing group; and in addition, if X represents a polymer, X' and electron withdrawing group W together with the interjacent atoms may form a ring; each of  $Z^1$  and  $Z^2$  independently represents a group derived from a biological molecule, each of which is linked to A and B via a nucleophilic moiety; or  $Z^1$  and  $Z^2$  together represent a single group derived from a biological molecule which is linked to A and B via two nucleophilic moieties; A is a  $C_{1-5}$  alkylene or alkenylene chain; and B is a bond or a  $C_{1-4}$  alkylene or alkenylene chain; are formed by conjugating a suitable polymer to a suitable biologically active molecule via nucleophilic groups in said molecule, preferably via a disulphide bridge.



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